

**AMENDMENTS TO THE CLAIMS**

Please amend claim 1 as indicated below:

1. (Currently amended) An isolated peptide which binds antibodies that are found in elevated levels in body fluids of schizophrenic patients, wherein said isolated peptide comprises a sequence of SEQ ID NO: 1, wherein

Xaa(1) is S , ~~I~~, ~~A~~, ~~D~~, or absent;

Xaa(2) is G , ~~A~~, ~~D~~, or absent;

Xaa(3) is E , ~~D~~, ~~S~~, or absent;

Xaa(4) is T or absent;

Xaa(5) is E or absent;

Xaa(6) is D or absent;

Xaa(7) is T or absent;

Xaa(8) is F or absent;

Xaa(9) is I or absent;

Xaa(10) is A or absent;

Xaa(11) is D or absent;

provided that:

when Xaa(11) is absent, Xaa(1) through Xaa(10), inclusive, are absent, and when Xaa(11) is D , Xaa(10) is A or absent;

when Xaa(10) is absent, Xaa(1) through Xaa(9), inclusive, are absent, and when Xaa(10) is A, Xaa(9) is I or absent;

when Xaa(9) is absent, Xaa(1) through Xaa(8), inclusive, are absent, and when Xaa(9) is I, Xaa(8) is F or absent;

when Xaa(8) is absent, Xaa(1) through Xaa(7), inclusive, are absent, and when Xaa(8) is F, Xaa(1) through Xaa(7) are, respectively, S, G, E, T, E, D, and T;

Xaa(19) is C, G, or P;

Xaa(25) is A or P;

Xaa(26) is P or A,

provided that Xaa(25) and Xaa(26) are taken together to form a sequence selected from the group consisting of AP and PA; and

Xaa(28) is R or absent.

2. (Canceled)

3. (Previously presented) An isolated peptide according to claim 1, which binds antibodies that are capable of binding to a peptide, wherein said isolated peptide is selected from the group consisting of:

- a. SGETEDTFIADLVVGLCTGQIKTGAPCR (SEQ ID NO: 2);
- b. LVVGLCTCQIKTGPAAC (SEQ ID NO: 3);
- c. IADLVVGLCTGQIKTGAPCR (SEQ ID NO: 4);
- d. ADLVVGLCTGQIKTGAPCR (SEQ ID NO: 5);
- e. DLVVGLCTGQIKTGAPCR (SEQ ID NO: 6);
- f. LVVGLCTGQIKTGAPCR (SEQ ID NO: 7);
- g. LVVGLCTGQIKTGPAAC (SEQ ID NO: 8); and
- h. LVVGLCTPQIKTGPAAC (SEQ ID NO: 9).

4-6. (Canceled)

7. (Previously presented) An isolated peptide according to claim 1 which binds antibodies that are found in elevated levels in body fluids of schizophrenic patients, said isolated peptide comprising at least one antigenic epitope, said epitope having a cyclic three dimensional structure consisting of a hydrophobic core and a positively charged extension.

8. (Previously presented) An assay for the diagnosis of schizophrenia in an individual, comprising the following steps:

- a. obtaining a sample from said individual being a blood sample, a platelet-containing fraction thereof, or a fraction containing platelet-associated antibodies (PAA) shed from the platelets;

b. contacting said sample with an isolated peptide according to claim 1;

c. determining the level of binding of said peptide to said sample, a level higher than the binding level of said peptide to a sample from non-schizophrenic individuals indicating that said individual has a high likelihood of having schizophrenia.

9-10. (Canceled)

11. (Previously presented) An assay according to claim 8, wherein the isolated peptide in step (b) is an isolated peptide selected from the group consisting of

- a. SGETEDTFIADLVVGLCTGQIKTGAPCR (SEQ ID NO: 2);
- b. LVVGLCTCQIKTGAC (SEQ ID NO: 3);
- c. IADLVVGLCTGQIKTGAPCR (SEQ ID NO: 4);
- d. ADLVVGLCTGQIKTGAPCR (SEQ ID NO: 5);
- e. DLVVGLCTGQIKTGAPCR (SEQ ID NO: 6);
- f. LVVGLCTGQIKTGAPCR (SEQ ID NO: 7);
- g. LVVGLCTGQIKTGAC (SEQ ID NO: 8); and
- h. LVVGLCTPQIKTGAC (SEQ ID NO: 9).

12. (Canceled)

13. (Previously presented) An assay in accordance with claim 8, wherein said sample obtained from the individual is a whole blood sample.

14. (Previously presented) A kit for use in the diagnosis of schizophrenia comprising:

- a. a support comprising one or more isolated peptides in accordance with claim 1 immobilized onto it;
- b. an anti-human immunoglobulin antibody or fragment thereof which maintains the binding characteristics of the whole antibody, said antibody or fragment thereof conjugated to a detectable marker;
- c. reagents required for carrying out the assay, and;
- d. instructions for use.

**INTERVIEW SUMMARY**

Applicants would like to take this opportunity to thank the Examiner for the courtesy extended during the brief telephone interview conducted on April 2, 2004. In accordance with the discussions held during the telephone interview, Applicants have amended the claims and sequence listing in the expectation that the amendments will place this application in condition for allowance. In particular, Applicants believe that they have amended to remove all instances of new matter in the claims and sequence listing, and respectfully submit that the claims as so amended, to avoid the new matter rejection, are also free of the cited prior art.

Applicants thank the Examiner for her helpful comments in indicating that the introduction of new matter into claim 1 with the last amendment has provoked the additional restriction and withdrawal of claim 1 in part, the new matter rejection, and the indication of art which would anticipate the claims as previously amended. Applicants also appreciate the indication of allowable subject matter in claim 1, upon removal of the new matter which triggered these rejections, as well as the indication of allowable subject matter in claims 3, 7-8, 11, and 13-14. It was agreed during the telephone interview conducted on April 2, 2004 that amendments to remove new matter would place the application in condition for allowance.